
Physician's Assistants in Primary Care Practices: Delegation of Tasks and Physician Supervision

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PHYSICIAN'S ASSISTANTS (PAs) are contributing increasingly to the delivery of primary health care. Such care delivered by PAs has been found to be acceptable to patients, and, under some circumstances, the quality of care has been judged to be high (1-3). The health care functions of PAs are influenced by the scope of practice, the kinds of tasks delegated to them, and the functional relationships of PAs to other auxiliary health workers at the practice sites.

In a study by Yankauer and associates (4), primary care physicians (MDs) were found to delegate clerical tasks more readily than technical tasks. (In this paper, we use MD as a designation for all physicians, including graduates of schools of osteopathic medicine.) The greatest number of tasks were delegated by physicians

in solo practices or in small practices employing two or more aides per physician.

In a study sponsored by the American Medical Association (5), PAs working with MDs in diverse practices in primary care specialties—such as general surgery and internal medicine—were performing a number of similar tasks. However, the levels of responsibility that the PAs were allowed in managing certain medical problems varied.

Braun and associates' study of graduates of the Duke University PA program and their physician supervisors also found variation in the levels of PA responsibility and independence (6). The graduate PAs performed 46.7 percent of all tasks without direct physician supervision. Furthermore, the PAs employed in private practice performed more tasks without direct physician supervision than PAs employed in institutions. The authors also noted that the PAs and their supervising physicians agreed on the major tasks (including history taking, physical examination, and medical tasks) that PAs could perform independently.

When a PA is introduced into a practice, he or she may assume wholly or partially certain tasks previously performed by the physician. However, the PA may also

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assume tasks previously performed by other non-MD health professionals.

There are several reasons for continuing studies of PA functions at primary care sites. First, the persuasive argument for establishing PA training programs has been that PAs could take on some functions previously performed by MDs and thereby increase access to health care to patients. Therefore, to maximize PA productivity, it is important that MDs not shift tasks to PAs that can be performed efficiently by other non-MD personnel. Second, physicians wishing to employ PAs in their practices must recognize what PAs believe they ought to be permitted to do for patients and, as far as practical, to take this into consideration in assigning tasks to PAs. The third reason is that the information on what PAs are doing in practices is important for educators to have in planning training programs.

The factors that influence the delegation of tasks by MDs to PAs are not well understood. Our study was undertaken to determine the kinds of tasks delegated by MDs to PAs in primary care settings and, so far as possible, to examine the influence of selected factors on the delegation of such tasks.

Method

The names and addresses of PAs and their supervising physicians were obtained from the Iowa State Board of Medical Examiners. The PAs and MDs were sent letters explaining the purpose of the study and inviting them to participate in the study. The study was performed between July and November 1977.

At the time of the study, 66 PAs were practicing at 35 sites in Iowa. However, 21 (32 percent) of the PAs (who practiced at 5 sites) were excluded from participation because they worked at tertiary or State health centers and were not providing primary care. Consent to participate in the study was obtained from 32 PAs at 22 sites; however, 4 of these PAs at 3 sites withdrew before data could be collected because of death or illness of the supervising physician. Thus, the study included 28 PAs at 19 practice sites.

Of the 13 PAs at 9 sites who refused to participate in the study, 8 at 4 sites were in the process of terminating their employment, and 5 at 5 sites gave no reason for refusing.

Data were collected by questionnaires and by site visits. The questionnaires were used to collect informa-

tion from both the PAs and their supervising MDs concerning the kinds of tasks the PAs performed. The extent of MD supervision of the PAs in performing a task was also determined. Also, information was sought about certain tasks not assigned to PAs at primary care sites.

The questionnaires, mailed to the MDs and PAs 2 weeks before the date of the first site visit, included 90 tasks commonly performed at practice sites. The list of tasks was drawn from a similar list used in previous studies (5,6) and modified on the basis of suggestions from a panel of MDs practicing in Iowa.

The supervising MDs were requested to indicate for each task if, based on the PA's training, they thought the PA was qualified to perform the task (yes or no). If the answer was yes, the MDs were requested to indicate the level of MD supervision the PA would require. The three levels of MD supervision of PA functions used for the study were (a) no MD supervision, (b) minimum MD supervision—the PA could perform the tasks in the MD's absence but only with the knowledge and specific consent of the supervising MD, and (c) maximum supervision—the PA could perform the task only in the presence of the MD.

With respect to tasks not assigned to PAs, the MDs were requested to select the most appropriate reasons for nonassignment from the following: (a) too great a medical risk associated with the PA's performance of the task, (b) the patients preferred that the MD perform the tasks, (c) the quality of the PA's performance of the task was too low, (d) the tasks could be performed by other non-MD personnel (the tasks would underutilize the PA's ability), or (e) the task was not performed in the office.

The PAs were requested to complete a similar form, in which reason (c) "the quality of the PA's performance of the task was too low," was omitted. The physicians and the PAs were requested to complete the questionnaire independently.

The completed questionnaires were reviewed, and inconsistencies in responses were resolved by interview with either the PA or the MD during the site visit. All information on the returned forms could, therefore, be used for analysis.

The list of tasks was grouped into 5 categories: administrative (4 items) and data collection tasks (7 items), nursing tasks in support of examination of patients (7 items), diagnostic (39 items), treatment and patient management (28 items), and patient counseling tasks (5 items).

Data were collected at the practice sites by three research assistants experienced in interview techniques and data collection in a health care setting; two were

graduate students in the liberal arts, and the third had a bachelor's degree in sociology. The research assistants had instructions and trials in data collection in the pediatric clinic at the University of Iowa before the study began. The data collected at the sites were reviewed weekly for errors and inconsistencies. To obtain a broader sampling of the practice pattern while minimizing the cost of the study, the first set of data was collected for 2 consecutive days, and a second set of data was collected 63 ± 6 days (for 2 consecutive days) after the initial visit.

The tasks performed by the MDs, PAs, and other health care providers at the practice sites were recorded in continuous time by direct observation as the patient progressed through the health care system. The research assistants observed and listened to the PA interactions with patients in all but two sites; at these two sites, the desired information was obtained from the PAs as soon as they completed the patient interview and examination. Additionally, health care tasks that the PA performed by telephone were identified.

To aid the research assistants in data collection at the sites, flow diagrams of the health care systems similar to those of Sims and associates (7) were developed. Periodically, work sampling and review of patients' charts were performed by the staff in the project or by a second assistant, and a task profile of the PA activities was thus obtained which could be used to check the reliability and to control the quality of data collected by the research assistant.

The data gathered at the practice sites included information on the pattern of demands for medical services (such as types and characteristics of patients requiring care, presenting symptoms, and diagnosis), the kinds of tasks performed by health care providers in meeting these demands, and the extent of the PA's autonomy in performing these tasks. We present data on the tasks delegated to the PA and the level of PA autonomy in performing these tasks, as well as data on the tasks performed by PAs that were observed at site visits.

Results and Comments

Characteristics of practice sites. Of the 19 practice sites, 15 were family practices, 4 were other primary practices in internal medicine; 8 were solo practices, and 11 were group practices with 2 to 8 physicians. All MDs at 8 of the 11 group practices provided varying amounts of supervision to the PAs; however, the PA was usually directly responsible to 1 easily identified MD (hereafter referred to as the supervising MD). In each of the remaining three group practices, only one physician supervised the PA.

The geographic distribution of the 28 PAs in the study was similar to that of the 66 PAs practicing in Iowa at the time of the study. Of the 28 PAs, 19 (67.7 percent) worked in towns with 10,000 or fewer inhabitants, and 9 (32.1 percent) worked in towns with populations of more than 10,000. Of the 66 PAs working in Iowa, 30 (45.5 percent) were in towns with populations of 10,000 or less, and 36 (54.5 percent) were in towns with populations of more than 10,000.

Task delegation. Because the delegation of tasks to PAs by MDs may depend on the level of training of other health workers in the office, we collected information on the tasks performed by nurses, nursing aides, and technicians. At the 19 practices, 58 percent of the nurses were registered nurses (RNs), and 42 percent were licensed practical nurses (LPNs). A third-year nursing student was working at one of the study practices. Three practices had only LPNs. About half of the solo practices and all the group practices had laboratory technicians. During the study it was obvious that nurses in group practices tended to work for short periods in particular office areas. Therefore, it was not possible to assign tasks to a specific nurse. A decision was then made to record all information about activities performed by nurses without recording which nurse performed an activity.

The perception of the MDs and PAs of the PAs' qualifications to perform the listed tasks was examined by analysis of the completed questionnaires. The extent of agreement between the MDs and PAs about the PAs' qualifications to perform certain tasks was high (for 84 percent or more of the PAs and MDs) and was similar for most administrative, data collecting, nursing, diagnostic, treatment and management, and patient counseling tasks. MDs and PAs disagreed markedly in their perceptions of PAs' qualifications for performing 12 diagnostic tasks (table 1). Tasks that both MDs and PAs believed should be performed by others are listed in table 2.

Steinwachs and associates (8) and Miles and Rushing (9) found that when a PA is introduced into an office practice, the MD delegates to the PA some tasks that the MD would normally have performed in providing health care to patients if the PA were not in the office. However, Reinhardt (10) pointed out that PA skills would not be fully used if, in addition, the MD delegates to the PA tasks which could be performed quite efficiently by other trained personnel (for example, nursing tasks that could be performed more efficiently by nurses).

Because Miles and Rushing (9) reported that PAs assume some nursing functions in rural office practices,

we examined the data for those tasks that the MDs and PAs perceived as not requiring full use of PA capabilities (that is, tasks that could be performed efficiently by other personnel). We found that tasks that could be performed by other health workers were rarely delegated to PAs (table 2). Although a high proportion of PAs and MDs agreed that administrative tasks fell into this category, significantly more MDs than PAs classified nursing tasks in this way. For example, more MDs (68 percent) than PAs (25 percent) classified the task "escorting patients to room" as one that should be performed by a health worker other than a PA. However, some inconsistencies were noted—26 percent of the MDs compared to 50 percent of the PAs preferred that the nursing task of "explaining examination to patients" be performed by personnel other than PAs. A possible explanation for these observed differences may be that PAs and MDs differed in their views of the health care delivery process. The PAs may have used the time for escorting patients to the room to socialize and become better acquainted with the patients, whereas the physician may have preferred that another health care worker perform this task because of cost efficiency. However, we have no data to support our speculations.

We explored other factors which may have influenced the MDs' decision to delegate tasks to PAs. One physician indicated that PAs should not be given the task of "prescribing medications to patients" be-

Table 1. Extent to which physicians (MDs) and physician's assistants (PAs) believe tasks should be delegated

Task	Percent agreeing that PA is qualified to perform task	
	MDs	PAs
Obtain arterial blood specimen ..	63	86
Do skin test	63	96
Perform psychologic screening ..	32	71
Perform developmental evaluation	68	100
Order brain scan, liver scan, or others	100	57
Separate serum from blood	58	93
Perform serologic slide test (agglutination, precipitate, or others)	37	64
Examine stool for ova and parasites	58	96
Perform culture (plate culture in medium)	79	96
Perform urine pregnancy test	53	71
Perform hemoglobin and hematocrit determination	74	93
Prepare a Gram stain	47	96

NOTE: $P < 0.05$ for each of the 12 pairs of proportions.

cause of potential medical risk. Two of the 19 supervising MDs would not delegate the task of "obtaining spinal fluids by spinal tap" to PAs because of legal risk. None of the physicians selected "the belief that patients would prefer that an MD perform the task," "the quality of a PA's performance of the task was low," and "the task was not performed in the office" as reasons for not delegating tasks to PAs. The PAs were asked

to select reasons why MDs did not delegate certain tasks to them. Their responses were similar to those of the MDs.

The major factor determining the delegation of tasks to PAs by MDs was that both professionals (MD and PA) perceived the PA as competent to perform the tasks, and that the tasks could not be performed more efficiently by other trained health personnel.

Table 2. Tasks that physicians (MDs) and physician's assistants (PAs) believe PAs can perform but should be performed by other trained non-MD personnel

Task	Percent agreeing that task under-utilizes PA capabilities	
	MDs	PAs
<i>Administrative</i>		
Register patients	68	..
Obtain patient's record from file	68	79
Set up appointments	68	68
General recordkeeping	53	75
<i>Perform activities in support of physical examination of patients</i>		
Escort patients to room	68	¹ 25
Obtain temperature	74	54
Measure and weigh patients	74	¹ 46
Explain examination procedures to patients	26	¹ 50
Set required instruments for examination	53	¹ 29
Help patients undress and gown for examination	79	50
Comfort and hold patients during examination	74	54
<i>Diagnostic procedures</i>		
Perform activities in support of specimen collection	37	43
Write laboratory slips	32	36
Hold or immobilize patients for specimen collection	37	46
Instruct patients to collect specimens (urine, stool, and others) ...	32	43
Separate serum from blood	63	50
Perform blood test using dipstick or tablet	32	43
Perform serologic slide tests (agglutination, precipitation, and others)	42	¹ 14
Count red and white blood cells manually	47	¹ 21
Examine stool for blood	37	¹ 4
Perform culture (plate culture medium)	37	¹ 21
Test urine by dipstick or tablet	47	¹ 21
Perform urine pregnancy test	47	¹ 21
Perform hemoglobin and hematocrit determination	53	¹ 18
Perform pulmonary function testing .	26	¹ 1
Prepare a Gram stain	32	¹ 14

¹ $P < 0.05$.

Extent of MD supervision. We also looked at the factors influencing task delegation to PAs by MDs by examining the extent of supervision that the PAs required to perform certain tasks. Our hypothesis was that MDs would be less inclined to delegate tasks to PAs if the latter required direct MD supervision while performing the task.

The three levels of MD supervision that we examined were, as previously stated, no supervision, minimum supervision, and maximum supervision. The questionnaires completed by the MDs showed that when the MDs did not choose any of the three levels of supervision, they selected the alternative "PAs are not qualified to perform the task" (table 3). (To simplify the table, the tasks which all PAs and MDs agreed that PAs could perform independently with minimal or no MD supervision are excluded.)

The PAs and their supervising MDs agreed that the PAs could independently perform all the administrative and data collecting tasks, nursing tasks in support of physical examination of the patients, and patient counseling-education tasks. The MDs and PAs also agreed that PAs could perform with minimal or no supervision most of the diagnostic and treatment tasks. Only a small number of tasks were considered by MDs or PAs, or both, to require direct MD supervision of PA activities. Also, only a small proportion of MDs and PAs selected maximum MD supervision as the preferred mode of supervision (table 3). Therefore, we concluded that MDs and PAs prefer that PAs perform those tasks they can perform with minimal or no MD supervision. This finding is consistent with the theoretical module developed by Reinhardt (10), which predicted very little gain in productivity at the practice site if the MD's time for performance of a particular task is substituted for the MD's time for direct supervision of the PA's performance of the same task.

Observed task performance. A total of 1,497 patients were attended by the PAs. The frequency of tasks performed by the PA and other health care workers in the office was recorded. Particular attention was paid to the tasks the PAs and MDs performed in each other's presence. These instances corresponded to the frequency

of direct MD contact with the PA to provide health care for patients (PA supervision, consultations with MD by PA, and teaching of PA by MD).

The MDs' time in providing care to patients seen by the PAs ranged from 0.3 percent for all administrative tasks to 15.5 percent for all diagnostic tasks, as shown in the chart. Most of the MDs' time was spent in obtaining histories (from about 3 percent of the patients), performing the physical examination (for about 3 percent of patients), and prescribing medications and instructing patients on the use of these medications. The PAs worked quite independently in performing

tasks such as ordering electrocardiograms, roentgenographic studies of the chest, bones, and others, and blood chemical analyses. As in other practices (9), the PAs were observed to perform a substantial number of "nursing" tasks at our study sites and, in some instances (such as helping the patient gown for examination), the PAs, rather than the nurses, were performing the majority of the tasks.

Nursing activities were recorded for all nursing staff, regardless of their level of training. Therefore, it was not possible to correlate the level of training for nurses to the proportion of nursing tasks performed by PAs.

Table 3. Physicians (MDs) and physician's assistants (PAs) responses on extent of supervision for selected tasks, in percentages

Task	MDs (N=19)			PAs (N=28)		
	None or minimal MD supervision	Direct MD supervision	Not qualified to perform task	None or minimal supervision	Direct MD supervision	Not qualified to perform task
Obtain arterial blood specimen	84.2	..	15.8	78.7	7.0	14.3
Obtain bone marrow aspirate	36.8	5.3	57.9	25.0	10.7	64.3
Obtain spinal fluid by spinal tap	47.4	..	52.6	46.4	..	53.6
Obtain gastric specimen by nasogastric intubation	47.4	15.8	36.8	85.7	10.7	3.6
Obtain other tissue specimens	94.7	..	5.3	96.4	..	3.6
Obtain hearing test	94.7	..	5.3	96.4	3.6	..
Do skin test(s)	94.7	..	5.3	96.4	..	3.6
Perform psychologic screening	73.7	..	26.3	75.0	..	25.0
Perform developmental evaluation	94.7	..	5.3	96.4	..	3.6
Perform urinalysis	100.0	..	..	100.0	..	..
Perform vision test and tonometry	94.8	..	5.3	96.4	..	3.6
Order brain and liver scans, or others	84.2	..	15.8	85.7	..	14.3
Separate serum from blood	94.7	..	5.3	96.4	..	3.6
Perform blood test using dipstick or tablet	89.5	..	10.5	89.3	..	10.7
Perform serologic slide tests (agglutination, precipitation, or others)	84.2	..	15.8	85.7	..	14.3
Count red and white blood cells manually	89.5	..	10.5	89.3	..	10.7
Examine stool for ova and parasites	73.7	..	26.3	67.9	..	32.1
Perform urine pregnancy test	89.5	..	10.5	89.3	..	10.7
Perform hemoglobin and hematocrit determinations	89.5	..	10.5	89.3	..	10.7
Perform pulmonary function testing	73.7	..	26.3	67.9	..	32.1
Prepare a Gram stain	94.7	..	5.3	96.4	..	3.6
Put a cast on a fracture	94.8	5.3	..	85.7	14.3	..
Perform a cardiopulmonary resuscitation	94.8	5.3	..	89.3	10.7	..
Prescribe medication	94.8	..	5.3	92.9	3.6	3.6
Insert IUD	73.7	..	26.3	71.6	3.6	25.0
Administer I.V. fluid	100.0	..	..	96.4	3.6	..
Perform minor surgery (other than ones specified)	94.7	..	5.3	96.4	..	3.6
Perform physical therapy	68.4	..	31.6	75.0	..	25.0
Remove ingrown or damaged nail	100.0	..	..	92.9	3.6	3.6
Remove foreign body from the cornea	100.0	..	..	82.1	14.3	3.6
Pierce ears for earrings	89.5	..	10.5	89.3	..	10.7
Do a cutdown (venous or arterial or both) ..	47.4	10.5	42.1	42.9	21.4	35.7
Aspirate bladder suprapubically	47.3	5.3	47.4	46.4	10.7	42.9
Aspirate joint	79.0	..	21.1	96.5	3.6	..
Clean wound or burn	100.0	..	..	96.4	3.6	..

Sequencing of tasks. In a primary care practice setting, the MDs may prefer that the PAs see the patients first and then request consultation with an MD. The PAs have the discretion to request MD supervision and consultation in performing their health care tasks. On the other hand, the MDs may prefer to see the patients first and then assign specific tasks to PAs to perform for the patients. The PAs in this situation have little discretion with regard to which health care tasks they must perform. An examination of the sequence of patient-provider encounters should, therefore, provide another method for studying task delegation.

For this study, a sequence of patient-provider contacts was the order in which patients came in contact with various health providers. Thus, if a patient was attended by a PA, followed by a nurse, and then again by the PA, the sequence of patient-provider contacts would be PA—nurse—PA. The sequences of patient-provider encounters in which the PA participated were recorded on 2 randomly selected days of the 4 days when data were collected at each practice site. Sequences of patient-provider encounters were available for 925 (62.8 percent) of the 1,497 patient visits observed during the site visits. The distribution of primary complaints, final diagnoses, ages, and payment source of the 925 patients for whom sequences of patient-provider encounters were available was not significantly

different from those of the 572 patients for whom no sequences were available. ($P > 0.05$ for all variables tested by use of the chi-square test).

The most frequent health manpower sequences (for which the recorded frequency was greater than 4) are shown in table 4, which is therefore a partial listing for the original 925 patients with recorded sequences. In only 126 (13.6 percent) of the 925 patient visits with recorded sequences was the physician one of the providers. Of these 126 patients, 13 (10 percent) were initially examined by MDs and subsequently seen by PAs. The remaining 113 patients were initially attended by PAs and then by MDs. The MDs examined 28 of the 113 patients and consulted with the PAs on the remainder.

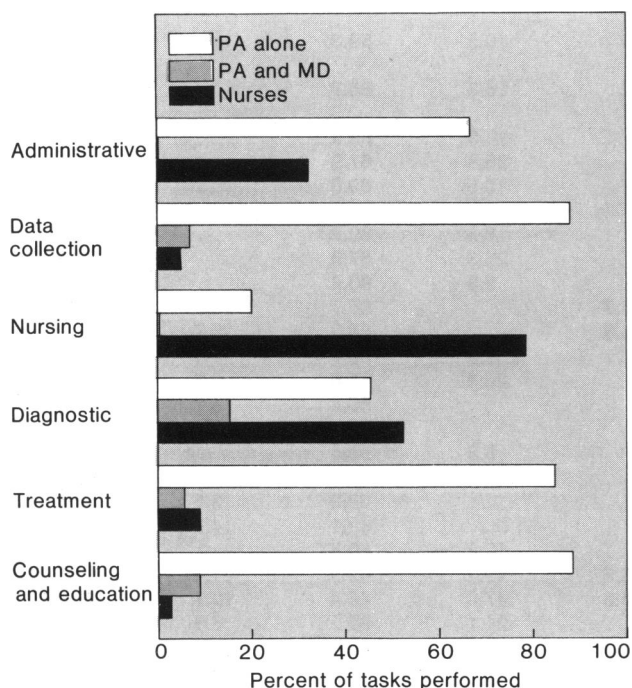
A sample of the recorded sequences for the 15 most common final diagnoses observed at the practice sites is shown in table 5. A wide range was seen in the numbers of patient-provider contacts for patients with similar final diagnoses; a similar range was noted when the presenting complaints instead of the final diagnoses were used for analysis.

Table 4. Partial listing of the most frequently observed health manpower sequences required to provide services to patients

Health manpower sequence	Number of patients
Receptionist—nurse—PA	288
PA	69
Receptionist—nurse—PA—nurse—PA	50
Receptionist—nurse—PA	48
Receptionist—nurse—PA—nurse—receptionist	41
Receptionist—PA—receptionist	38
Nurse—PA—nurse	29
Receptionist—PA	25
Nurse—PA	23
Receptionist—nurse—PA—PA and nurse—PA—receptionist	11
Receptionist—nurse—PA—other ¹	9
Receptionist—nurse—PA—PA and physician—PA—receptionist	8
PA and physician	7
Receptionist—nurse—PA—PA and nurse—receptionist	7
Receptionist—PA—PA and physician—PA—receptionist	6
Nurse—PA and nurse	5
Receptionist—nurse—laboratory technician—nurse—PA	5
Receptionist—nurse—nurse and laboratory technician—PA—receptionist	5
Receptionist—nurse—PA—nurse and laboratory technician—PA—receptionist	5
Receptionist—nurse—PA—receptionist	5
Total	684

¹ Other includes physiotherapists and radiology technicians.
NOTE: PA = physician's assistant

Percentage distribution of recorded tasks performed by physician's assistants, physician's assistants and physicians, and nurses



Several factors could be responsible for the MDs' participation in only 126 of the 925 patient visits with recorded sequences. Because the sequences were recorded for 2 of the 4 days in which data were collected, it could be argued that the sequences were recorded on the days when the PAs consulted less frequently with the MDs. But this does not appear to be so, because an analysis of the proportion of health care tasks performed by the MDs for patients seen by PAs on days when sequences were recorded was identical to the proportion of tasks MDs performed for patients seen by PAs on days when no sequences were recorded. An alternative reason is that PAs actually provide health care with a high degree of autonomy. Data collected at site visits by direct observation of PA activities showed that PAs were independently providing a wide range of services to patients (see chart).

The presenting symptoms of the patients for whom patient-provider sequences were recorded were placed into five categories by a panel of four practicing primary care physicians to reflect the extent of risk to life (11). These categories were (a) immediately life-threatening, in which the absence of proper care might have resulted in the immediate death of the patient,

(b) high risk of rapid deterioration of symptoms, with no immediate risk to the patient's life but a likelihood of deterioration of symptoms within 12 to 24 hours without adequate therapy, (c) risk of subsequent worsening of symptoms with resulting increase in morbidity but without risk to life, (d) self-limiting symptoms which are likely to cause minimal morbidity, and (e) non-specific or vague symptoms that are not life-threatening and are associated with minimal morbidity.

A larger proportion of patients seen by MDs had the more severe presenting symptoms. Of the 126 patients seen by PAs, for whom MDs also provided health care, 66 (52 percent) had severe enough presenting symptoms to be classified in the preceding groups (a), (b), or (c). However, 40 (32 percent) of the 126 patients had vague or nonspecific symptoms.

It seemed reasonable to inquire if patients who had seen PAs and MDs had, on the average, a higher frequency of patient-provider contacts than those who had not seen MDs during their visits. The mean number of patient-provider contacts of 3.1 per patient for those who saw the PA but not the MD was not significantly different from the mean number of 3.5 per patient for those who saw both the PA and the MD ($P>0.05$).

Table 5. Most common health manpower sequences required for 15 most common examinations, illnesses, or conditions at 19 practices

Type of examination performed and illness or condition treated	Nurse—PA	Nurse—PA—nurse	PA	Receptionist—nurse—PA	Receptionist—PA	Receptionist—PA—receptionist	Receptionist—nurse—PA—receptionist	Receptionist—nurse—PA—receptionist	Receptionist—nurse—PA—receptionist	Total patients
Physical, normal examination	7	13	4	6	0	15	2	9	36	92
Upper respiratory infection	0	0	2	13	1	2	12	4	17	51
Hypertension	1	1	0	2	0	0	0	1	18	23
Otitis media, acute and bilateral	1	0	0	2	1	2	2	1	14	23
Obesity	0	0	0	0	0	0	0	1	2	3
Tonsillitis, acute	0	1	2	0	0	2	1	1	9	16
Pregnancy, regular check	0	1	0	1	4	0	0	1	7	14
Arteriosclerotic heart disease	0	0	12	0	0	0	0	1	1	14
Laceration, nonspecific	0	0	0	1	0	1	0	2	8	12
Acute pharyngitis	0	0	1	0	0	0	0	1	7	9
Urinary tract infection	0	0	2	1	0	1	0	0	6	10
Contact dermatitis, allergy or eczema	0	1	0	1	0	0	0	1	5	8
Warts	0	0	0	2	0	0	0	0	8	10
Bronchitis	0	0	1	0	0	0	1	0	8	10
Well baby-well child examination	0	1	0	0	0	2	0	2	0	5
Total	9	18	24	29	6	25	18	25	146	300

NOTE: PA = physician's assistant.

Conclusions

We examined eight factors which may influence MDs' decisions to delegate health care tasks to PAs. Physicians did not delegate tasks to PAs if they perceived that the PAs were not qualified to perform the tasks or if the PAs required direct MD supervision to perform the tasks. Additionally, the MDs did not delegate to PAs tasks which they perceived could be performed efficiently by other non-MD health care providers. Legal and medical risks associated with PA performance of a task were only occasionally selected as reasons for not delegating tasks to PAs. The quality of a PA's performance of tasks and patients' requests that an MD perform tasks were not the reasons why MDs did not delegate tasks to PAs. The MDs' perceptions of what tasks ought to be delegated to PAs agreed in most cases with those of the PAs working for them.

Only a relatively small number of factors that may influence an MD's delegation of tasks to a PA were studied. In subsequent studies, a greater number of factors should be examined; for instance, the influence of the number and level of training of other non-MD health professionals in the practice office on the types of tasks delegated to PAs. It is also not clear from this and other studies the means by which physicians allocate patients to PAs. This factor is important because in this study PAs independently attended a large number of patients without MD consultation. None of the PAs in the practices that participated in this study used a well-defined algorithm for patient care, although there seemed to be an informal understanding among the health care providers about which patients should be allocated to PAs.

Because PAs in this study functioned with a high degree of autonomy, the PA's recognition of a patient's need for appropriate consultation with an MD should also be studied. Such studies are important because the

concept of using PAs in an office practice is based on the assumption that MDs can delegate certain tasks to them. Physicians cannot, therefore, spend as much time supervising PA functions as they would to perform the tasks themselves.

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SYNOPSIS

EKWO, EDEM (University of Iowa Hospitals and Clinics, Iowa City), DUS-DIEKER, LOIS B., FETHKE, CAROL, and DANIELS, MARVEL: *Physician's assistants in primary care practices: Delegation of tasks and physician supervision. Public Health Reports, Vol. 94, July-August 1979, pp. 340-348.*

Little information is available on factors influencing physicians (MDs) to delegate health care tasks to physician's assistants (PAs). Information

about assignment of tasks to PAs was sought from 19 MDs engaged in practice in primary care settings in Iowa. These MDs employed 28 PAs. Tasks assigned to PAs appeared to be those that MDs judged to require little or no supervision. Tasks that could be performed efficiently by other non-MD personnel were not assigned to PAs. However, PAs were observed at the practice sites to perform tasks which the MDs had indicated could be ap-

propriately assigned to PAs, as well as some tasks that could be performed by other non-MD personnel. The MDs provided health care to 126 (13.6 percent) of the 925 patients seen by PAs for whom the sequences of patient-provider contact were recorded. In these settings, the PAs functioned with a high degree of autonomy in providing health care. These findings have implications for educators and potential employers of PAs.